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Green is the New Black: The Effects of COVID-19 on the Fashion Industry's Need for Sustainability

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Abstract

The thesis examines the impact COVID-19 has had on global fashion since its onset and aims to predict what the post-pandemic future may look like. First, it adopts a literature review methodology that aggregates information regarding COVID-19, sustainability in fashion, past financial crises, and how the industry from companies to consumers reacted to such shocks. Then, it investigates in detail the trends that the industry has embraced specifically due to COVID-19, whether they are similar or different from previous recessions. Highlighted trends include increased digitization (i.e. e-commerce, interactive media, and extended reality) and the rising consumer demand for sustainability (exemplified by the changing consumer mindset, second-hand shopping, and hyperlocality). Finally, the paper argues that a case study of China is a glimpse into the future of fashion after the pandemic because of 1) its quick recovery in COVID-19 cases and economic health 2) current and future position in the industry and 3) consumer trends and cutting edge technology that was in place much earlier than other countries. Through such reasoning, the study demonstrates that through COVID-19, the Chinese apparel industry has unequivocally turned to sustainability, hinting that industry-wide changes will soon after occur as well.

Keywords

sustainability, fashion, sustainable fashion, covid-19, digitization, consumer trend, china, chinese consumers

Disciplines

Business Administration, Management, and Operations | E-Commerce | Fashion Business | Marketing

**GREEN IS THE NEW BLACK:
THE EFFECTS OF COVID-19 ON THE FASHION
INDUSTRY'S NEED FOR SUSTAINABILITY**

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An Undergraduate Thesis submitted in partial fulfillment
of the requirements for Joseph Wharton Scholars

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ABSTRACT

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Keywords: sustainability, fashion, sustainable fashion, COVID-19, digitization, consumer trend, China, Chinese consumers

INTRODUCTION

COVID-19 has been a one-of-a-kind disruptor for countless industries, with never-before-seen shocks and uncertainty. With the pandemic enduring for a much longer period than anyone had suspected, there is no doubt that it left and would leave a huge long-term impact on the economy. The fashion industry is no such exception, if not even more affected. According to the McKinsey Global Fashion Index analysis, fashion companies approximately reported a 90% drop in profit in 2020, compared to the 4% rise in 2019, and with the ongoing pandemic and volatility of the vaccine rollout as of February 2021, the next few years is a future that is hard to predict (Amed et al. 2020a, 12). The average market capitalization of the fashion industry dropped 40% between January and March of 2020, a much sharper decline than the stock market, with an estimated 27-30% contraction in revenue by the end of 2020. Many companies have filed for bankruptcy or face dire economic consequences and without a targeted strategy that is flexible and adaptable to the volatility of the circumstances, more would be left hopeless. Even before COVID-19 that “upended supply chains and crushed consumer demand globally,” there were major trends that can shine a light on what the new normal may look like, and how fashion retailers should go about to survive and evolve (Amed et al. 2020b, 19).

For legislators and organizations who are pursuing better, permanent ESG business practices, being knowledgeable about the current effects that COVID-19 has on the fashion industry will guide how to build a framework and write legislation that nudges businesses in the right direction and allows for an easier transition. To have a lasting positive impact, all parties related to the fashion industry need to work together, and the paper will provide a backdrop for such collaboration, whether it is awareness or specific business practices that the parties can build off

of. For rising customers who wish to spend money consciously, the paper will give a better guideline for what to notice when looking for sustainable companies.

The paper will first examine existing literature and find areas of further investigation regarding the COVID-19 pandemic itself, the effects of COVID-19 on the fashion industry, previous consumer trends in financial crises, and sustainability in fashion and its possible financial effects. After such literature review, the paper will delve into each section and argue that consumer behavior and the pandemic have fundamentally shifted the fashion industry to take into account sustainability, under the framework of a case study of China.

HYPOTHESIS AND REASONING

This paper's hypothesis is that COVID-19 has made a huge long-term imprint on consumers and corporations in the fashion industry, reinforcing and creating new trends towards sustainability. In order to better appraise and predict what the post-pandemic global landscape of the industry might look like, the current circumstances in China will be analyzed in detail. The paper will underscore how fashion is and should move towards a more sustainable future.

METHODOLOGY

Many of the methodologies that this paper will employ will be similar to Pero et al.'s "Sustainability in Fashion Brands," mainly focusing on secondary sources. These include academic papers, news articles, company websites, interviews, in-depth reports, and expert interviews and talks given at summits. While the majority of the sources will be qualitative data, there are some quantitative data that will also be incorporated such as Google Trends. The paper broadly adopts two methods, a literature review and a case study. For the literature review, there will be a traditional literature review followed by a deep analysis of consumer trends that surfaced due to the pandemic. The case study examines in detail a leading fashion market for possible projections in the near future.

LITERATURE REVIEW

This section attempts to aggregate current literature on the effects of COVID-19 on the fashion industry as a whole, beginning with a brief introduction to COVID-19 itself, and how the fashion industry reacts to general financial crises. Then, it will go into the new consumer trends that have accelerated due to such an unlikely event, and finally ending on the current literature regarding sustainability in fashion.

COVID-19

After a year of unprecedented times that every part of the globe inevitably has had to persist, there has been a large accumulation of literature surrounding COVID-19. COVID-19, more commonly known as coronavirus, is a severely infectious disease that claimed over 2.7 million deaths as of March 2021 (Yong 2020; Yamamoto et al. 2020; COVID-19 Dashboard 2021). The first case of the disease was reported by Dr. Li Wenliang in Wuhan, China in December 2019. The disease presented similar symptoms to severe acute respiratory syndrome (SARS-CoV) in 2003 and was formally named (SARS-CoV-2). Literature states that while COVID-19 affects every age group, the elderly have considerably more severe symptoms and higher mortality rates. Over 1000 articles, news, and other sources have stated that the symptoms of the virus appear after an average of 5.2 days and the onset ranges from 6 to 41 days. Common symptoms include fever, cough, fatigue, shortness of breath. COVID-19 not only has had a tremendous impact on physical health but also on mental health, with self-isolation contributing to further economic hardship and possibly higher mortality rates due to anxiety, suicide, and other mental illnesses (Yamamoto et al. 2020).

On a macro level, there has been a huge accumulation of research on the global socio-economic impacts of COVID-19. Nicola et al. (2020) found that in primary sectors, the agriculture sector faced enormous shocks; prices of agricultural commodities fell by more than 20% due to decreased demand from hotels and restaurants, with perishable goods like vegetables getting hit harder. Secondary sectors like the manufacturing industry encountered just as much hardship, with importation issues, staffing shortages, decreased production. Finally, tertiary sectors that consist of virtually every other industry such as education, finance, healthcare, real estate, and especially travel is “grappling with an unprecedented wave of cancellations and a significant drop in demand” with millions of jobs lost (Nicola et al. 2020).

Recessions

There is extensive literature regarding how recessions and financial crises affect the fashion industry in particular. Many of such are primarily based on the most recent 2008 financial crisis. The effects of the financial crisis varied by sector and country, but for the fashion industry specifically, there is widespread consensus that because fashion is largely a discretionary good, it is much more sensitive to financial fluctuations. Much of the literature focuses on luxury retailers and their responses to the global financial crisis, whether it is consumers’ price sensitivity or increased competition between brands for capital and consumers (Worrell 2018, 3). Brick and mortar retailers especially are found to take the biggest hits such as high-end department stores. For instance, according to Bain and company, “sales nosedived 25 percent, leading to early markdowns of 70 percent, and an overabundance of stock. A new crop of “flash sale” retailers, such as Gilt, thrived off the excess inventory” (Arnett 2019). Such thriving by

digital retailers has echoed again in the later section regarding customer shifts during the COVID-19 pandemic.

To stay resilient amidst a recession, studies have shown that during the 2008 crisis that “the clarity and strength of the brand’s identity were found to ... drive competitive advantage” (Worrell 2018, 22-23). Indeed, heritage luxury brands such as Richemont fared better than less historical luxury brands (Arnett 2019). Strategic responses from corporations to such recessions typically included reduced inventory, expense reduction, and working to expand online measures, similar to patterns we see currently amidst COVID-19 (Worrell 2019, 42). Recovery from the most recent recession was due to the huge increase in Chinese consumer spending, and by 2013, Asia-Pacific had overtaken Europe as the largest luxury market (Arnett 2019). Experts are now expecting to see fashion sales amidst COVID-19 be worse than the 2008 financial crisis because of higher uncertainty, manufacturing disruptions, required store closures, and the global impact it has (Indvik 2020b).

Finally, there is a unified consensus that despite the pronounced negative impact financial crises have on the fashion industry, if utilized well, there are substantial opportunities. Many sources state that “brands and retailers that survive a recession may emerge with a more engaged and loyal set of customers, fewer competitors, and additional assets and opportunities” (Arnett 2019).

Customer Shifts during Financial Crises

Another widely covered aspect of financial crises is how consumer behavior and values shift. Generally, recessions lead to drastic reductions in consumer spending, but there is detailed

research regarding how consumers explore cheaper alternatives, previously not part of the consideration set, and actually enjoy the products. Research from McKinsey & Company found that of the customers who switched to cheaper products, a large majority said the performance of the products was much better than expected (Bohlen et al. 2009). In fact, 41 percent of switchers stated that even though premium products were preferable, they were not worth the money and 34 percent stated that they no longer preferred higher-priced products. In a similar vein, Lockrem (2013) found that as a result of recessions, the purchase intention of consumers has shifted to not only wanting lower prices but also better value (11). Brands need to alter their strategies and market their products as having the best value since customers have realized that they can survive with cheaper products. Interestingly, Thomas and Hirsch (2018) stated that consumers have been conditioned to seek deals as a result of the 2008 crisis but this conditioning has persisted even one decade later. The shift in consumer purchase intention to be more bargain-oriented can also be seen in the booming off-price channel 250 new luxury outlet openings in 2008 to 2009 and the expansion of outlet sections in department stores such as Nordstrom Rack and Saks Fifth Avenue (D'Arpizio 2009, 14).

This shift in customer purchase intention also occurred in luxury customer segments. Reyneke (2010) found that luxury consumers since the recession were much more cautious and selective when shopping and even preferred choosing single items instead of bulk purchasing (137). However, this post-recession consumer behavior is not the same in the developing countries of BRIC (Brazil, Russia, India, and China) with the growth in the wealthy population and rising awareness and availability for luxury goods (Lockrem 2013, 12). The growing desire for luxury products is especially evident in China as it was a major contributing factor to the post-crisis

recovery and growth of the global luxury industry. This contrast in consumer behavior shifts can also be seen in the post-crisis recovery of different countries with developed economies struggling and emerging market economies experiencing rapid growth.

Sustainability

Sustainability in fashion has been a key topic in recent years even before the pandemic. The fashion industry is known to be one of the greatest polluters in the world, and from both an environmental and social perspective, various research has been conducted on how to combat such an issue. For instance, Millennial and younger Generation Z's increasing demands for fashion brand's contribution to ecosystem wellness have pushed fashion brands towards certain action plans (Pero 2020). These include eco-design, corporate social responsibility, sustainable manufacturing, sustainable reporting, to name a few (Sherman 2020). However, with increasingly complex and oftentimes murky guidelines, greenwashing issues, lack of good data, and the overall slowness in implementation, sustainability continues to be a challenge in fashion (Kent 2020).

In particular, there is extensive existing literature on supply chain management and sustainability. Because of never-before-seen business globalization, a strong connection in supply chain networks also meant that black swan events were easier to disturb entire supply chains through a domino effect (Rinaldi & Bandinelli 2017, 96). Building resilience in the supply chain through flexibility, robustness, agility, and surplus industry was previously believed to tackle supply chain risks and stabilize market disruptions. However, COVID-19 has proved that such traditional strategies were not enough, especially in global supply chains and networks utilized

by fashion retailers (Majumdar et al. 2020, 150-155). Solutions for better sustainability practices often focus on building a sustainable, lasting supply chain both upstream and downstream (McMaster et al. 2020, 155). For instance, Moretto et al. (2018) planned out a 5 step solution towards a sustainable supply chain for fashion companies: law compliance AS-IS evaluation, internal sustainability improvement, SC assessment and improvement, SC and system development. Indeed, there is an increasing number of sustainability and CSR reporting, especially with a focus and predominance of environmental issues (Pero et al. 2020). Furthermore, the literature review of Pero et al. (2020) found out there was an increasing emphasis on training in the workplace, indicating that fashion companies are moving towards a more proactive rather than reactive approach in terms of sustainability. However, Pero et al. (2020) highlight that sustainability reports by luxury companies are still limited. Kozlowski et al. (2015) find that corporate sustainability reporting in the apparel industry is lacking in consistency, with 87 reported indicators that they identified.

One interesting trend to note is that there are different approaches to sustainability depending on the company's geographical location. Galli and Bassanini (2020), through a cluster analysis, found that for many companies, China-specific sustainability initiatives were heavily impacted by company dimensions, company nationality, the management of the supply chain operation in China given its magnitude.

There has been an expanding set of literature regarding the relationship between sustainability and financial performance in companies. There is in-depth research especially in impact investing and financial performance during crises; Du et al. (2014) and Kempf and Osthoff

(2006) find that during financial downturns, socially responsible investment funds are less subject to volatility and in actuality perform better.

There has been some research into the potential financial effects of having sustainable programs in fashion. In terms of fashion companies, price elasticity is difficult to accurately measure according to Kalla et al. (2017) because of how differentiated each brand usually is.

Also, while it requires “significant resources and continuous commitment which affect cash flows and resource allocation of the fashion enterprises” early in adoption, such adoption, in the long run, can greatly improve the financial performance of fashion enterprises especially in financial crises (Li et al. 2016, 57-70). Especially after financial tsunamis, Li et al. (2016)’s findings show that the higher the level of supplier integration (SI) and green sustainability programs (GSP), the better the financial performance such as net income, inventory turnover, and ROA. Reducing packaging, energy consumption, and waste disposal, as well as providing guidelines for energy and audits, is shown to reduce production costs and ultimately gain more profits (Li et al. 2016, 57-70). They also found a statistically significant relationship between “fashionability”, SI, and innovation (which they measured through product life cycles and faster time-to-market).

Gaps in Literature

From this literature review, the paper has identified several research gaps that can be addressed in the next following sections. First, one has found that sustainability programs in fashion companies that are not traditional luxury brands are not as covered extensively. Whether it is cutting-edge fashion startups or large multinational brands focused on affordability, there is a

lack of coverage outside of luxury brands. Such lack is even more so companies headquartered outside of North America and Europe. Second, there is a lack of literature for sustainability practices other than traditional supply chain management practices. In order to create a more accurate picture of sustainability in fashion, there needs to be more discussion on other ways for companies to be more sustainable, such as digitization, second hand shopping, or company action plans. This is especially relevant for leading brands that do not own their entire supply chain. Third, the COVID-19 phenomenon is fairly recent and still ongoing, necessitating more extensive literature on both the short and long-term implications on the fashion industry, especially for actions that were taken by companies and consumers from the onset of the virus until now. In order to ensure accuracy and meaning, such coverage must be constant as it is uncertain when the pandemic will end.

CONSUMER BEHAVIOR

There is no doubt that COVID-19 was a huge influence on consumer behavior in the fashion industry. Many trends that were already present before the pandemic were made even more prominent due to the virus and some were brought to life suddenly. This section aims to underline some of these germane progressions.

Digitization

The Rise of E-Commerce

One of the biggest trends during the pandemic, if not the biggest, was the digitization of fashion. Even before COVID-19, the rise of e-commerce giants such as Amazon and eBay and the pervasiveness of the Internet in even the most rural, isolated communities around the world pushed fashion brands to have a larger online presence, whether it was the growing prominence of social media marketing or creating online websites ideal for shopping digitally. However, with COVID-19, digitization and e-commerce were no longer a supplementary addition to brick and mortar stores, it became a necessary alternative in the past year. Over eight months of 2020, e-commerce sales doubled from 16% to 29% globally, a six-year jump in estimated growth. Farfetch had a 74% increase in revenue in the second quarter of 2020 compared to 2019, and digital traffic for websites of the top 100 European brands had an uplift of 45% (Amed et al., 2020a, p. 35). Not only were digital marketplaces higher in revenue, but they were also resilient in terms of their stock performance, with an average of 42% higher valuation than other fashion companies. Similar to past financial crises, there was more consolidation and concentration in the high performers, with a widening difference between the traffic of key e-commerce players

and lesser-known retailers (Amed et al., 2020a, p. 35). According to the BoF-McKinsey State of Fashion 2021 Survey, 70% of fashion executives answered that they expect growth of more than 20% from their digital channels. Such growth is led by China and the rest of Asia, then Europe, and finally the US.

Even though a majority of fashion's environmental impact is attributable to the manufacturing process, the surge in online shopping with COVID-19 has led e-commerce brands to acknowledge their growing role in the industry and the need to address the greater sustainability issue. The thriving e-commerce space has upheld the fashion and apparel industry but at the same time has led to greater packaging waste and transport emissions. One clear example is the British-Portuguese e-commerce platform, Farfetch, which recently implemented a 10-year sustainability strategy after experiencing dramatic growth in online sales during the pandemic (Ecobahn 2020). In terms of logistics, since April 2020 Farfetch has been investing in environmental projects to offset the carbon footprint of every delivery and return. Independently certified and verified, these projects include planting and protecting forests around the world as well as switching to renewable energy. The platform also utilizes algorithms that prioritize brands and items that come from stores nearest to the customer's location to not only improve the customer experience but also cut costs and carbon emissions. For packaging, Farfetch has replaced plastic options with paper and card packaging that are fully recyclable and sourced from sustainably managed forests. Moreover, recognizing the importance of collaboration in driving meaningful change at an industry level, Farfetch is helping the broader fashion industry by sharing its knowledge with initiatives such as the G7 Fashion Pact and The United Nations Fashion Industry Charter for Climate Action. Farfetch also has a "Dream Assembly" technology

accelerator program that supports sustainability-focused startups entering the industry. CEO and Chairman José Neves stated, “last year we saw an accelerated move of luxury fashion sales online, which has only increased the need to prioritize our work in this area and has provided us with the opportunity to embed sustainable and inclusive business practices in the way we grow our business” (Portee 2021). Many large e-commerce platforms around the world have also followed in Farfetch’s footsteps such as German-based Zalando and Australia-based The Iconic with impactful initiatives in both logistics networks and packaging. The coronavirus pandemic and the associated surge in online sales prompted e-commerce companies to re-evaluate their business models and environmental impact. Such widespread adoption of sustainability principles represents an interesting shift as the e-commerce industry moves into the intersection of fashion, technology, and sustainability.

Interactive Media and Extended Reality

One facet of digitization that the fashion industry has especially embraced due to COVID-19 is a much more radical innovation incorporating new interactive technologies. Pre-pandemic, while fashion companies were making aggressive investments towards e-commerce, they were hesitant to rely on other technologies. For example, fashion shows have persisted for many decades with failed occasional attempts at change, mostly involving a music video format. This was mainly due to the absence of other sensory elements such as the chance to touch and interact with fabrics and decoration (Silvestri 2020, 64).

However, COVID-19 and its need for social distancing forced brick-and-mortar retailers to find alternate forms of physical interaction. To connect with audiences who want to be surprised and involved by brands consistently, the industry looked towards interactive media and new revenue streams. Messaging apps such as Line, Telegram, and WeChat prominent in Eurasia and Latin America became a resource for offline retailers and remote shopping (Amed et al. 2020a, 37). Ralph Lauren and Snap Inc. are currently working together to create virtual branded apparel for avatars; likewise, Louis Vuitton and the League of Legends have already introduced in-game skins to accompany a real-world capsule collection (Amed et al. 2020a, 37).

Furthermore, where it is not possible to integrate human interaction, brands are now utilizing virtual reality (VR) and augmented reality (AR), augmented by artificial intelligence (AI) to boost conversion and create enhanced experiences. Commonly known as an Omnichannel approach, companies are working hard to link their media together and create one channel with multiple touchpoints and memorable shopping experiences that “differentiate one’s brand from competitors” and obtain customer loyalty (Silvestri 2020, 62). Traditional virtual shopping lacked in integrating multiple sensory experiences, which can be augmented by VR and AR. Such an experience escalates both immersiveness and presence that customers now require from brands. VR and AR allow the illusion of both physical interaction (through background sound, three-dimensionality of space, and vibration) and social communication (avatars and interaction with people in physical space).

Virtual try-on is one such example. Even traditional retailers like Grand Seiko which were resistant to digital formats have now implemented virtual try-ons (Amed et. al 2020a, 37). GAP AR app is another example; the GAP Dressing Room allows customers to try on clothes anywhere with a Google Tango-enabled device. Such try-ons have also expanded to virtual showrooms and virtual fashion shows, in which VR headsets would allow any customer to have a front-row seat from the comfort of their own homes anywhere in the world. Customers, by being able to interact with the 3D models of the collection by spinning or zooming, can have an even more detailed experience than traditional fashion shows (Silvestri 2020 65). Saks Fifth Avenue, Brunello Cucinelli, Balmain, A.P.C, JW Anderson, are just a few of the multitude of brands and retailers who have all endorsed virtual showrooms in the past year (Yotka 2020). Such diversity in the brands and retailers, whether it is luxury or value point to just how relevant VR and AR have been during the pandemic. And the potential for financial gains is limitless; Shopify, after adding the possibility to add AR 3D models for all merchants, saw a surge of 250% in conversion rates (Mcdowell 2020). There are multiple costs that can be minimized with VR and AR experiences that fashion companies are trying to take full advantage of. There are explicit costs such as the process of hosting traditional fashion shows, facilitating returns, and managing showrooms that can be significantly reduced. Additionally, implicit costs such as increasing purchase intention, personal data, and brand identity can also be minimized through the implementation and widespread use of VR and AR. Moreover, AR and VR will help shoppers purchase items that they keep and continue to wear through an enhanced shopping experience and increased purchase intention. With technologies such as virtual showrooms and try-on, customers are much less likely to purchase pieces that do not fit or suit them because they can preview items before purchase in a digital and hassle-free manner. Reducing customer

returns will then dramatically impact fashion waste as brands are not forced to get rid of excessive amounts of unsold inventory. All these new technologies not only tackle the fashion industry's sustainability issues but also create an omnichannel ecosystem featuring storytelling that seamlessly connects digital and physical shopping experiences.

In a similar fashion, more and more brands are going beyond physical limitations and embracing completely digital clothing. The trend is nothing brand-new as virtual fashion has evolved from gaming platforms to the runway. The gaming industry has been selling in-game cosmetics and skins for decades with games such as Fortnite and League of Legends earning billions in revenue annually (Webster 2019). As there are essentially no limitations on creativity, the concept has been quickly gaining interest in the fashion industry. Likewise, physical ownership is becoming partially redundant because there is a growing demand for fashion pieces for the sole purpose of digital content creation (Roberts-Islam 2020). This generation of consumers purchases items only to take and post pictures on social media platforms, and it is fairly common that these outfits are only postable once. The concept of digital fashion came into practice in 2018 when Scandinavian fashion house, Carlings, launched a collection called Neo-Ex that only exists digitally (Moen 2018). Customers upload a posed picture of themselves and Carlings' 3D designers tailor the clothes to the image so that it looks as if they are wearing the pieces physically (see figure 1). Demand was immense as the 19 genderless and sizeless pieces sold out instantly. In 2019, Fabricant, the world's first digital fashion house, sold its "Iridescence" digital couture dress for \$9,500 shown in figure 2 at an auction at the Ethereal Summit in New York (Roberts-Islam 2019). Fabricant also releases monthly outfits that are free to download. Furthermore, there are now e-commerce players with only digital clothing such as Dress-X and

XR Couture (Roberts-Islam 2020). Dress-X assists players like Fabricant by listing digital collections on its e-commerce platform as well as providing a method for customers to tailor and wear the item, which is similar to the in-house capabilities of Carlings. However, Dress-X also helps brands to create digital versions of their physical products using 3D digital design methods. In terms of sustainability, the founders of the e-commerce platform have estimated that the carbon emission from the energy required for them to create a digital men's white t-shirt is 0.312kg CO₂e compared to 6.5kg CO₂e from traditional methods based on a report by the Carbon Trust. Such calculations show the huge potential for digital fashion to reduce the carbon footprint of the fashion industry. Eliminating almost all sustainability issues of the fashion industry, digital fashion represents one of many solutions to fixing fashion's problem of excessive waste and mass production. There is no physical waste or water consumption in the design, sampling, and manufacturing processes. Problems associated with unethical supply chains do not exist because raw materials are simply lines of code. Labour issues are mitigated since workers are highly educated and skilled computer programmers and designers. While the space is growing rapidly, digital fashion players recognize that virtual items are not going to completely replace the physical fashion industry, but there is so much potential in this idea that has gone from a mere concept to a widely adopted trend.



Figure 1. Carlings' Neo-Ex worn by influencers and models. (Photograph from Carlings. In "Virtual Fashion: The Digitally Generated Clothes Appearing On Your IG Influencer Feeds". By Sara Semic. Elle, Jul 2, 2019.)



Figure 2. Fabricant's Iridescence digital couture dress on model Johanna Jaskowska. (Photograph by Julien Boudet. In "World's First Digital Only Blockchain Clothing Sells For \$9,500". By Brooke Roberts-Islam. Forbes, May 14, 2019.)

Consumer Demand for Sustainability

The second trend that this section hopes to articulate is the consumer mindset shifting towards sustainability long term. In contrast with prior financial crises in which consumers focused mainly on cheaper prices, COVID-19 became a tipping point in which consumers now had a third factor that determined their purchase intent: values of the companies they were buying from.

Changing Mindset of Consumers

Consumers have been increasingly expecting a “response from brands that have become an intimate part of their daily lives,” whether it is a response on COVID-19 itself, or other social issues (Bemporad & Quindazzi 2020). Because of the lack of control that customers felt in their lives due to the inevitability of COVID-19, consumers originally engaged in seemingly irrational behavior such as hoarding (Chen 2020). As the pandemic persisted, on the other hand, customers now are attempting to “grasp for meaning and purpose” (Chen 2020). In the design sense, casualization trends such as athleisure and activewear have gained much momentum, exemplified by sportswear company stocks exceeding pre-crisis levels by 7% by October 2020, while non-sportswear companies were down 18% (Amed et al. 2020, 25). In terms of value systems, customers were shifting towards quality and “using their values to shop, whether it’s an emphasis on sustainability or racial justice in the US” (Chen 2020). Some experts are claiming that COVID-19 is signaling an end, not a pause, to extreme consumerism, with 15% of

consumers expecting to buy environmentally and socially responsible clothing, and brands permanently shifting business models to cater to such values (Amed et al. 2020b, 19).

Such interest in sustainability in the fashion industry is demonstrated further by figure 3, a graphic representation of the relative number of Google searches of the word “sustainability fashion” and related terminology such as “sustainability in fashion”, “sustainable fashion”, and “fast fashion” in the world. Figure 4 delineates the total number of queries used to create the graph. One can clearly see that there has been an increase in the number of searches throughout the years, with it being searched much more in the last 5 years. What is interesting to note is the time frame between March 2020 and March 2021. In March 2020, the term hit a 100 on the relative search interest and fell for the next 3 months, but rose again from June. This can be seen as correlated with the trends of COVID-19; COVID-19 was declared a pandemic by the World Health Organization in March 2020, which initially concentrated all attention to the pandemic, but as the months went by and people needed to adapt to a “new normal,” with minimal outside activity and digitized shopping, interest in sustainability fashion grew alongside it. 54% of consumers according to Kantar Monitor believed that brands have an important role for social issues such as #MeToo and Black Lives Matter, and when brands try to engage in such issues for marketing tactics, are quickly called out. A McKinsey consumer survey found that 66% of consumers would stop or significantly reduce shopping at a brand that exploits their employees (Amed et al. 2020a, 46).

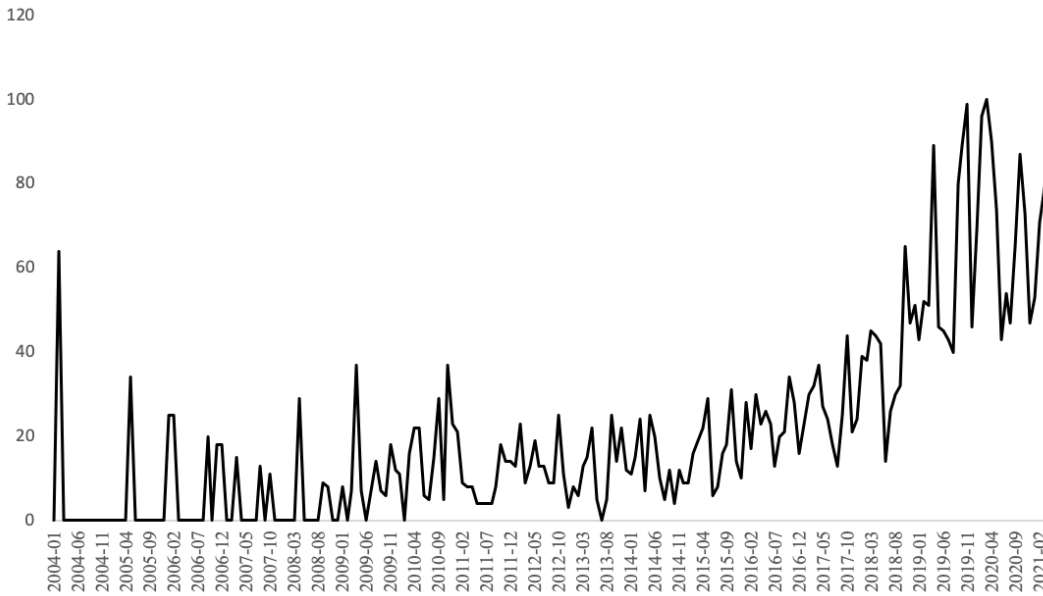


Figure 3. Relative search interest of “sustainability fashion” and its related terms from 1/1/04-4/8/21 worldwide. (Data sourced from Google Trends.)

Sustainability in fashion	100
Sustainable fashion	68
Fast fashion	33
Sustainability in fashion industry	29
Fast fashion sustainability	29
What is sustainability	17
Sustainability in the fashion industry	14
Fast fashion and sustainability	10
Fashion sustainability course	8
Sustainable fashion brands	7
Fashion sustainability courses	4
Define sustainability	1
Fashion and sustainability course	1

Figure 4. Related queries of “Sustainability Fashion” from 1/1/04-4/8/21 worldwide. (Data sourced from Google Trends.)

And such enthusiasm and yearning for sustainability pushed media and key stakeholders outside of the companies to produce content regarding sustainability. Related to customers looking specifically towards matching personal values to their shopping habits, fashion criticism exponentially increased. With digital content creators such as Diet Prada that “call out designers for cultural appropriation, as well as copycatting, and are not afraid to criticise other media outlets as well,” customers are requiring more and more transparency and accountability in brands (Sherman 2020).

Another example is Business of Fashion, an independent journal that analyzes the \$2.5 trillion global fashion industry, launched its in-house Sustainability Index in March 2021 for 15 of the fashion’s largest companies. Its proprietary methodology again highlighted lagging public commitments and disparities between engagement and actual action (Kent 2021, 8). Specific limitations include lack of tangible progress, misinformation in supply chains, financing gaps, and pushing boundaries for innovation in a circular economy. From the six categories that they assessed, which were transparency, emissions, water and chemicals, materials, workers’ rights, and waste, the outperformers were Kering and Nike, in contrast to the weakest players Under Armour and Richemont.

Second-hand Shopping

To go more in-depth about some of the more specific shopping trends related to sustainability, the resale market and secondhand clothing market have expanded enormously because of the pandemic. Not only have consumers been forced to rethink their buying habits, because of less disposable income, financially, they also realized that they can only be more conscious of what they buy, treating them as an investment. Similar to the previous financial crisis, long-term, second-hand shopping and smaller businesses that manufacture responsibly will thrive (Indvik 2020a). But such an increase in second-hand shopping was not only due to its relatively cheaper prices but also because of its circular and sustainable nature. Simply put, the financial impact of the pandemic and shoppers' concerns about waste and the environment played hand in hand in such rapid growth. Even before the pandemic, the resale market was surging, valued at about \$28 billion. The recent IPOs of the RealReal and the popularity of Depop and Poshmark reinforce such an appeal. However, COVID-19 accelerated such a shift, and now resale is set to be a \$64 billion market by 2024. This is particularly true for online secondhand shops, which are estimated to grow 27% in 2020 and 69% between 2019 and 2021, according to GlobalData. Research suggests that 70% of women in 2019 have shopped or are open to shopping secondhand, with 82% being open to thrift shops when faced with money constraints (Marino 2020, 14). With Gen Z customers and Millennial customers who are much more socially and environmentally responsible accounting for more than 50% of the total customer base in the US, such growth is only to continue (Toriello et al. 2020). Such a rise is not only on the demand side of thrift shopping but also on the supply side. ThredUp data delineates that 50% of people are cleaning out their closets after COVID-19, and there were 6.5 times more donation clean-out kits

ordered in April 2020 than prior months (Marino 2020, 7). An influx from both the demand and supply side allows for a quicker turnover that suits constantly evolving customer appetites. And now, the resale industry is expected to be bigger than fast fashion by 2029. Such a takeover again illustrates that COVID-19 was the pivoting moment for fashion to turn to sustainability.

The final factor that added to such a surge was the value and entertainment that Millennials and Gen Z found in thrift shopping. As the prior section on digitization and customer demand for engagement in shopping indicates, consumers now require their shopping to be elevated and personalized. Chief Financial Officer of RealReal Matt Gustke stated that because “many items sold at secondhand shops can’t easily be found elsewhere” thrift shopping gives a one-of-a-kind feel and uniqueness that is “driving a perception change” for previously reluctant shoppers and an expanding cult following (Garcia 2019). Thrift shopping is now perceived to be a hobby rather than a chore that consumers can excitedly participate in and potentially find hidden gems.

Hyperlocality

An interesting trend that has emerged from the pandemic is the pattern of hyperlocality with customers pivoting to shopping local brands and products. Initially, this trend in consumer spending may seem contradictory since the surge in online shopping from the lockdown has allowed consumers to substantially expand their consideration set with countless brands from around the world. In truth, there have been hefty moves towards digitization. However, as omnichannel shopping developed exponentially, along a higher seamless transition from online to offline, hyperlocal shopping has also increased. With the halt of international tourism, and the

fatigue that comes also with shopping everything entirely online, hyperlocal shopping complemented digital shopping in terms of customer experience, cost efficiency, and most importantly sustainability. Robert Burke, a New York-based retail consultant who works with clients globally, stated that post-crisis recovery is going to happen first in areas that are “not heavily tourist-dependent” and “where it’s a local shopper” (Amed et al. 2020a, 30). Given the complementary nature of hyperlocality and the uncertainty around tourism’s recovery, it has become critically important for brands to attract customers locally. For example, the 2020 Louis Vuitton show in Shanghai was both cast and produced locally, and teams were driven to organize a completely original show instead of a repeat of previous years. Chairman and Chief Executive Officer of the French fashion house, Michael Burke, described the show as getting away from a “neo-colonial approach where everything happens in New York, London, Paris or Milan and gets trickled down through various [markets] and they replicate” (Amed et al. 2020a, 50). Similarly, Anne Pitcher who is the Managing Director of the Selfridges Group, mentioned that their team views the decline in international travel as a unique opportunity to focus on local customers after years of attempting to attract international customers (Amed et al. 2020a, 57). Recognizing a pattern of stronger recovery outside capital cities, Pitcher predicts greater brand investment in not only digital offerings, but also developing a relationship with local customers to grow the domestic business. One thing the Selfridges Group has found successful is hosting digitally-enhanced store events for local customers, demonstrating how hyperlocality is supplemented by customers’ increasing demand for elevated retail experiences.

Situated at the crossroad of digitization and sustainability, hyperlocal strategies have been embraced by some of the largest brands and will only continue to accelerate as the broader fashion industry acknowledges the importance of customer experiences and sustainability.

CASE STUDY: CHINA AS A POSSIBLE OUTLOOK

This paper argues that analyzing China and its current fashion landscape as a case study is a glimpse into the post-pandemic future. What is the rationale behind investigating China? The answer is threefold: 1) its rapid recovery in both COVID-19 and the economy 2) its current and future stake in the fashion industry and 3) consumer trends and innovations that were implemented long before other countries.

First, fashion sales have already largely been recovered in 2020 in China unlike other countries in the West. Malls by the end of 2020 have reopened from Beijing to Wuhan, and because global travel has virtually stopped, most spending has been occurring domestically (Amed et.al 2020a, 26). More broadly, China's economy grew at a record pace in the first quarter of 2021, in contrast with other major countries, more than rebounding its pre-pandemic activity. As early as August 2020, retail sales were positive, and sportswear players like Nike and Lululemon and luxury conglomerates such as LVMH and Kering made significant headway (Hall 2020b). Such growth takes into account the challenges China is currently facing with lower vaccine efficacy rates, travel limitations, and US sanctions. Economists predict that such a return is much less likely for Europe, Japan, and many other countries (Dou 2021). Hence, much of the recovery of fashion sales come directly from China, with luxury placing even heavier reliance on the country for revenue. Indeed, as of April 2021, China is planned to have more than 100 runway shows and a season packed with symposiums, exhibitions, showrooms, and trade shows (Suen 2021). This demand is amplified by the fact that due to limitations on travel, consumers are forced to spend more money in the mainland than abroad. Amrita Banta, managing director of Agility Research

and Strategy attests to this increase, stating that she has clients tripling in business compared to 2019. Mauro Maggioni, Asia-Pacific CEO of Golden Goose said “Mainland China has become the place where all the purchase power is trapped” (Hall 2020b).

Second, it is not only the fact that they are an early recoverer that makes them so significant in fashion, but also that they are a huge part of the customer base. To start off, the 2008 financial crisis and the role China played in recovery in its aftermaths shine light on how influential the country is in fashion and the global economy as a whole. As the literature review revealed, the speedy recovery that the industry faced was due to the increasing number of wealthy citizens in developing countries of BRIC, especially China, with their economies growing a staggering 7.3% in contrast with high-income countries’ 3%; China accounted for over 20% luxury good purchases in 2011 (Lockrem 2013, 12). According to a Bain report in 2009, right after the financial crisis, China was seen immediately as a new frontier for luxury, with growth restarting from the second quarter of 2009 because of internal Chinese tourism, and positive organic performance in the existing stores (D’Arpizio 2009). This is exactly parallel to the current trends that one saw with COVID-19 and the concentration of tourism in specific parts of China, especially in Hainan. In order to combat the lockdown at the start of 2020, the Chinese government relaxed offshore duty-free allowances in Hainan, which greatly impacted domestic consumption. In the two months from July to the end of August 2020, duty-free sales grew by 222% to \$815 million, officially making China Duty Free Group the world’s largest duty-free retailer by turnover (Hall 2020a). Such domestic spending is buttressed by government officials putting more restrictions on *daigou* (translated to surrogate shopping) sellers of grey-market goods in the last few years. Even not taking into account COVID-19 itself, since 2019, China has

been the world's largest fashion market, with some experts predicting that it will soon surpass the US to be the world's largest consumer market (Zhang 2020). And because China is the biggest fashion market in the world, China's behavior *is* ultimately the fashion industry's behavior. However, not only so, its sheer size consequently influences other regions to follow suit, thereby conclusively cementing the shift of the global fashion industry.

Finally, China was much earlier in line with the current trends that are now being seen in global fashion, which signifies that parts of the post-pandemic future are already the present in China. As mentioned beforehand, there was a huge move towards digitization on both the supply and demand side during the pandemic. On the other hand, it is crucial to highlight that many parts of digitization that the industry is now aggressively employing in the American and European markets gained traction before and immediately after the start of COVID-19 in China. The innovative use of E-commerce is one example. The livestream commerce that we are beginning to take notice of such as Instagram Live introduced in August 2020, started as early as 2016 in China with the launch of Alibaba's Taobao Live. By 2019, Chinese livestream revenue added up to \$63 billion and mounting to an estimated \$138 billion in 2020. While Tiktok hosted its first shoppable livestream in August 2020, the Chinese version Douyin already launched flagship storefronts for brand accounts by April 2020 with more than 220 brands introduced (Amed et al. 2020a, 36; Suen 2021). More broadly, industry-level efforts on creating immersive experiences for fashion were done much earlier in China, whether it was from brands collaborating with the esports industry regularly, or art exhibitions in which you can shop products in. The lag between trends in China versus the rest of the world continues with the trend of the use of AR and VR. Their integration of virtual reality is far more advanced and nuanced than the rest of the world, as

seen with the launch of Dimension Nova, a new TV talent contest featuring entirely virtual idols by Chinese streaming platform iQiyi (Hall 2020a). In short, because of these three reasons, looking into China and what they are currently focusing on is extremely central in anticipating the future of fashion.

And what exactly is, colloquially speaking, the “next big thing?” It is sustainability.

Undoubtedly, the role China has on sustainability in fashion is enormous. “There is no luxury without China, there is no sustainability without China,” stated François Pinault, CEO of Kering, at the K Generation Talk & Award Ceremony in Shanghai (Mollard 2020). As the largest textile and apparel producer and consumer in the world, strategically, China is essential in the future of sustainability in fashion. For many Chinese urban cities, daily issues are all about the environment, from air pollution, poisoned food, and water scandals, to unbounded mass manufacturing. Since 2012, when the buzzword “airpocalypse” was conceived, the Chinese government and party have prioritized protecting the environment. In 2017, when President Trump announced the US’s withdrawal from the Paris Accord, China instead vocally supported the Agreement, hand in hand with the 13th five-year plan in 2016 which set a target of 4.5 million tons of recycled textile production by 2020 (Hall 2017). This environmental commitment is further showcased by China’s focus on a circular economy in textile and apparel.

The Chinese government, especially at the upper level, has been pushing for sustainability for more than a decade now. All companies listed on the Hong Kong stock exchange are now required to fulfill ESG requirements (Zheng 2019). The country has drawn up many legislation

that promote circular fashion domestically. The *Law on Promoting Clean Production*, the *Circular Economy Promotion Law*, *The Circular Economy Development Strategy and Near-term Action Plan*, and *Leading Action Plan on Circular Development*, are just some of the plans drawn up for its development (CNTAC 2020, 22). See figure 5, which is a model of circular economy in China's textile industry. From this diagram, one can see a variety of different ways waste can be reintroduced into the industry at different steps. Paying attention to the end product waste, and detailed classification of the recycling treatment — retailers have the most power in driving this process. As the party in direct contact with customers, the final destination before the textiles become waste, retailers have the ability to incentivize as many customers as they can to recycle or give them back the clothes. Through such a relationship, retailers can hold more buying power, helping manufacturers reduce material and other manufacturing costs. Indeed, textile waste management is much more advanced and mature in China than in other parts of the world, which will be discussed further in detail. What to note is that while this model is primarily focused on the textile industry, there are endless opportunities for retailers to apply and adapt to their own liking.

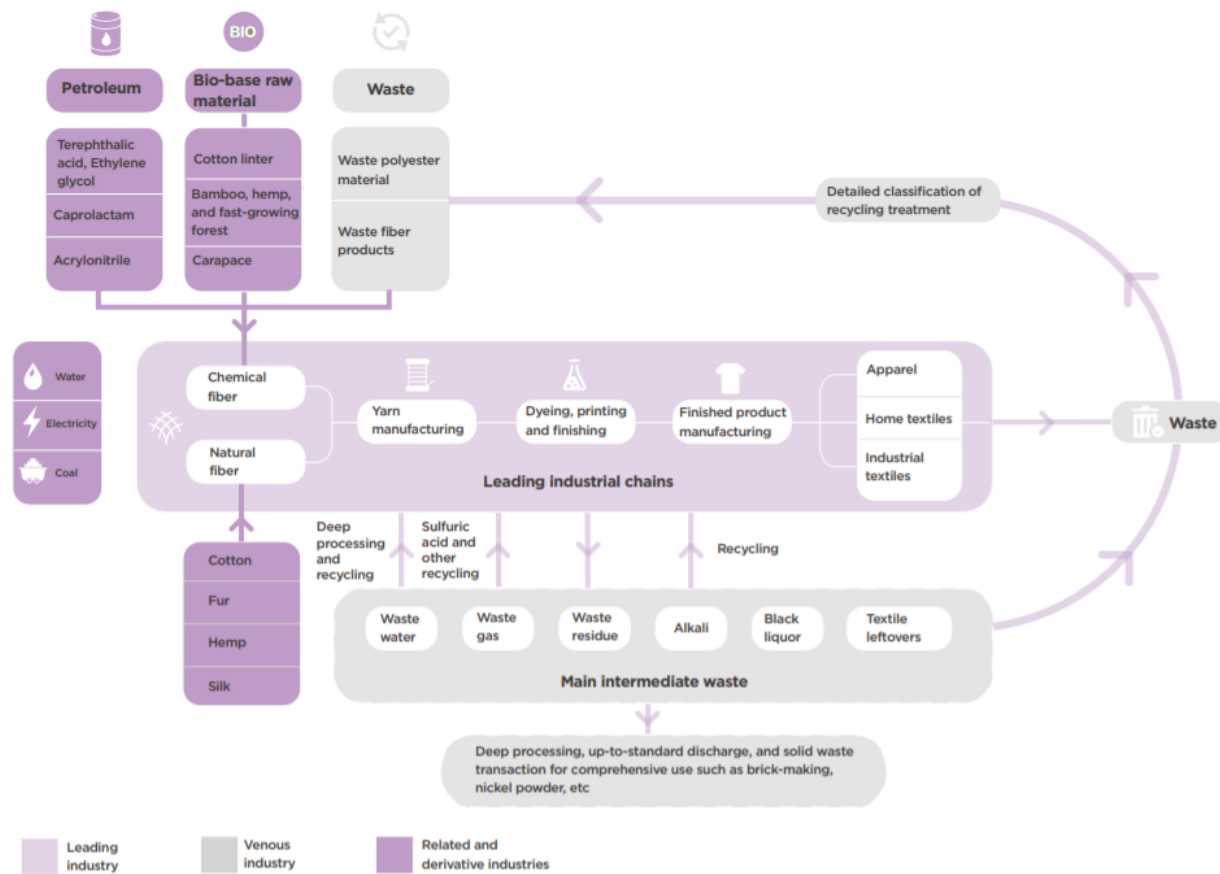


Figure 5. Model of circular economy in China's textile industry. (Diagram by CNTAC. In "Make Fashion Circular: Outlook for a New Textile Economy in China". By CNTAC. 2020.)

To dive deeper into different opportunities that Chinese apparel companies currently have in order to be more circular, three main types come into play: 1) diverse raw materials supply 2) green design and 3) resource utilization in production. The three factors are not separated, but in fact complement each other, which means that even with one adjustment in one of the factors, the other two are also affected. As the first step in the clothing-making process, there has been a lot of considerable progress in sustainable raw materials. The two main fibers that can be

sustainable are recycled fiber and bio-based chemical fiber. The former is beneficial in reusing waste, and the latter is most efficient in reducing the use of nonrenewable energy. Recycled fiber processing in China has steadily increased from 9.6% in 2010 to 11.3% in 2015, as well as the capacity for such processing (9.5 million tons in 2018 as opposed to the 5.5 million tons of production). This signifies that there is enough room for improvement even if no other technological improvements are made. In particular, recycled polyester fiber is making much headway, taking up more than 90% of the amount of recycled chemical fiber in total produced. China is the world's largest producer of recycled polyester fiber and now can completely replace traditional polyester. This development was due to the 13th Five-Year Plan, with the government pushing for the industry to grow, especially in clustered cities such as the Cixi city of Zhejiang province (CNTAC 2020, 28). The second sustainable fiber, a bio-based chemical fiber, is fibers that come in part from a biological source which is then processed by polymer chemistry. It allows for at least partial biodegradation, lessening environmental costs. There are a variety of different bio-based fibers currently being developed in China, as seen in figure 6. This wide range of fibers allows for a higher chance of success in implementing them into any type of clothing, as well as gives much more room for innovation (CNTAC 2020, 29). Retailers, by actively making the choice to use a more sustainable fiber, can be impactful in two different ways: 1) forcing the customers to buy in a more eco-friendly manner and 2) pushing manufacturers to produce more sustainable fibers. Because retailers are the bridge between supply and demand, with one change from them, the other two parties can also change, a chain effect. Such a choice in manufacturing transitions well into the next type of sustainability practice that China is making meaningful breakthroughs in.

Fiber varieties			2018 Production capacity Unit (ton)	Main application scenarios
New cellulose fibre	New solvent-spun cellulose fiber	Lyocell	61,000	With natural cellulose as the raw material, the new cellulose fiber is prepared by direct dissolving spinning process with organic solvent. It is mainly used in haute suits, knitted apparel, casual wear, and underwear. In recent years, it has also been used in industrial textiles for decoration.
		Low temperature alkali/Urea solution cellulose fiber	1,300	
	New resource regenerated cellulose fiber	Bamboo pulp regenerat-ed cellulose fiber	120,000	With bamboo slices as the raw material, the bamboo pulp is made into fiber by wet spinning. Suitable for close-fitting fabrics, non-woven cleaning products, and home textiles.
		Hemp pulp regenerated cellulose fiber	1,000	The fiber is made of natural jute and kenaf, which is suitable for close-fitting fabrics, non-woven cleaning products and home textiles.
Bio-based synthetic fiber	Degradable bio-based synthetic fiber	Polylactic acid (PLA) fiber	35,000	The fiber uses corn, tapioca starch and sugar beet as raw materials to produce lactic acid through fermentation, and then it is made into a completely bio-degradable synthetic fiber through advanced polymerization technology and melt spinning. The product is bacteriostatic, flame retardant, is bio-compatible and bio-absorbable, and has been successfully applied in apparel, home textiles, health and medical products.
		PHBV and PLA blend fiber	1,000	Used in nonwovens in recent years.
	Non-de-gradable bio-based synthetic fiber	PTT fiber	120,000	PTT fiber is prepared by polymerization of bio-based 1,3-propanediol (PDO) and terephthalic acid (PTA). The former comes from non-food raw materials such as cassava starch and glycerin. The fiber is widely used in carpet, fashion, T-shirt, jeans, swimwear, etc.
		PA56 fiber	30,000	Using pentanediamine and adipic acid as raw materials, this new type of bio-based polyamide fiber is synthesized biologically and is widely used in apparel, decoration, and industry field.
Marine bio-based fiber		Alginate fiber	5,000	The fiber is made from alginic acid extracted from brown algae in the ocean. It has started to be used in medical dressings, hemostatic gauze, industrial apparel, etc.
		Chitosan fiber	2,500	The fiber is made from shrimp and crab shell, and is naturally antibacterial, super absorbent, and hemostatic. It is mainly applied in the field of medicine.
Biological protein modified fiber		Soybean protein fiber	10,000	Biological protein modified fiber is a kind of modified chemical fiber, which is produced by adding soybean, milk, wool, and silk fibroin through blending, grafting, and other means during chemical fiber production. It is widely used in underwear, home textiles, women's special sanitary materials, and also in biology, medicine, and other fields.
		Wool protein fiber		
		Milk protein and acrylonitrile grafted fiber		
		Silkworm chrysalis protein fiber		

Figure 6. Variety of main bio-based fibers being developed in China in 2018. (Diagram by CNTAC. In “Make Fashion Circular: Outlook for a New Textile Economy in China”. By CNTAC. 2020.)

Ecological design, “the systematic consideration of a product’s impact on resources and the environment within its lifespan including choice of materials, production, sales, use, recycling, disposal, etc. in the perspective of whole life cycle,” according to the Ministry of Environmental Protection of the People's Republic of China, is the most crucial step in making a meaningful impact (CNTAC 2020, 32). In fact, it states that 80% of all environmental impact is determined during the design phase of the product. Such practice is mainly powered by the companies themselves. The report divides the practices into four different steps for companies: product design and development, raw material selection and use, manufacturing, and product recycling and delineates the different ways that companies can be more green, including building a life cycle database for each product, selecting high-quality suppliers, using green digital printing design technology that reduces the consumption of energy and high manpower, and building a recycling system (CNTAC 2020, 33). These practices are very applicable to retail brands that do not have a direct influence in the manufacturing process. The fact that their choices in fabric, design and a recycling system within their reach can drastically shift their ecological footprints is a lesson that can be learned all over the world.

Examples of some of the Chinese textile companies that are in the spotlight for green design include Erdos Group, Pacific (Panyu) textile printing and dyeing Co., Ltd., Wensli Group, Consignee Group, Fujian Baichuan Resources Recycling Science & Technology Co., Ltd., and Dragon Fuhuan Technology Co., Ltd.. These 6 companies were approved by the Ministry of Industry and Information Technology (MIIT) as apt for its mission for sustainability (CNDC 2020, 32). Ruyi, the fashion house that owns brands such as SMCP, Bally, and Aquascutum, was one of a handful of Chinese fashion groups to sign the Fashion Pact, an environmental pledge put

forward by Kering to align the industry with the UN Sustainable Development Goals and put forward by Kering (Zheng 2019). Clothing brands that are gaining popularity in the country for their focus on sustainability include Icicle, Reclothing Bank (a label that upcycles old clothes), Hong Kong's ffiXXed studios, and Klee Klee. The two that are of particular attention are Icicle and Klee Klee.

Icicle Fashion Group, founded in 1997 by couple Ye Shouzeng and Shawna Tao, is a ready-to-wear Shanghai brand based on a natural-way ethical fashion philosophy with a “vertical and integrated supply chain covering original design, manufacture, logistics, retail and franchise” (Icicle Group 2021). Materials are selectively selected, with only natural fibers such as “Japanese organic cotton, cruelty-free Chinese heavy silk, and Belgian linen” and “ethical textile manufacturers and eco-friendly technologies are key requirements” (Chin 2021). Tao admits that for the first decade since its launch, the company “devoted to educating consumers about the benefits of natural fibres and the advantages of vegetable dying and tanning” until the milk powder poisoning scandal in 2008 which led to the deaths of six babies and hospitalization of 54,000 (Hall 2017). This was a shocking turning point for Chinese shoppers to focus on safety. Throughout the next decade, Icicle built a loyal customer base with its production quality. The brand now boasts 250 stores and three factories in Mainland China (Chin 2021; Hall 2017). Annually, they generate around 1.3 billion yuan (approximately \$200 million) and in 2020, they seized the top spot of Tmall's 11.11 Singles Day sale in the luxury womenswear category, outpacing established brands like Theory and Sandro (Chin 2021).

Another example is klee klee, a sub-brand of ZUCZUG, an enterprise with over 100 stores domestically and reported annual revenue of 8 million yuan (\$1.3 million), founded in 2010 (Zheng 2019). Taking its name from Tibetan, meaning ‘slow down’, throughout the 10 years, klee klee cemented its cult-like status for going against visual excess and embodying natural and organic materials. It also puts emphasis on collaborating with ethnic minorities in China such as the Dulong community within its Naze Naze framework, “promoting traditional skills such as weaving [...] provid[ing] support to vulnerable rural indigenous culture”(Lawson 2020). Klee klee, understanding that shoppers face difficulty trying to weave through whether a certain brand is actually eco-friendly, have clearly product labels and easily understandable descriptions (Lawson 2020). The two company’s huge success is just a glimpse into the enormous appetite for sustainable fashion in China.

An important distinction about the current efforts towards sustainability in China is that there is much less greenwashing than other companies. Because the sustainability movement was initially mainly a top-down initiative, with the government actively seeking ways for companies and citizens to engage in sustainable activities, companies that were putting in the effort to be more impactful in sustainability were not doing them for marketing ploys. Shaway Ye, a group style editor of Modern Media Group and pioneer of the sustainable fashion movement in China states that there isn’t much posturing in China, and especially younger fashion entrepreneurs are committed to supporting the cause (Casey 2017). By being able to jump such an obstacle that the West continues to face, there are two colossal advantages: 1) China can make much quicker progress in actual sustainability and 2) Chinese consumers are not misguided when it comes to

buying according to their values. Such “impact buying” transitions to the final stakeholder of the formula, the actual shoppers.

Along with the supply of eco-friendly fashion, more and more Chinese consumers are becoming aware and akin to sustainable fashion. Until recent times, even many experts believed that the majority of Chinese customers either were not aware of sustainable fashion or simply did not care about sustainable fashion. However, such a belief is far from the truth. In reality, the picture is much more nuanced and complex. Awareness and willingness to purchase sustainable products have improved dramatically. A random survey conducted by the Office for Social Responsibility of CNTAC in 2019 with a total of 5002 Chinese respondents showed that more than 67% of consumers do pay attention to sustainable products, 30% are aware of sustainable products but do not know where to buy them and 26% not only pay attention but will intentionally purchase them. Only 2% of shoppers were not interested in sustainable fashion (CNTAC 2020). Research by AliResearch revealed that 66 million customers (16.2%) on Alibaba’s China marketplace bought five or more green products in 2015, and were open to paying an average of 33% of a premium for green products (Achim 2021).

The results are clear; the demand for sustainable consumption in China is there, and COVID-19 expedited the appeal. According to the Edelman’s Trust Barometer Special Report, 82% of Chinese consumers started buying from a new brand as a compassionate response to the outbreak. Such an increase in local brand purchases ties well with the hyperlocal trend mentioned above. Furthermore, according to Heuritech, the world’s first artificial intelligence

(AI) service that can predict the fashion trend, in Spring 2021, forecasted that linen will grow in visibility by over 32% for women in comparison with last year, “a considerable nod to the sustainable fashion movement in the country” (Mollard 2020). Such awareness is especially important for two key customer bases: 1) younger generations like millennials and Gen Z customers and 2) upper middle-class customers. Both customer bases are growing rapidly, with the upper middle class demographic projected to grow to 31% of the population by 2030, compared to 8% as of 2017 (Hall 2017). This cohort of price-insensitive, quality-seeking customers is much more likely to actively seek out sustainable fashion, which signifies just how much more demand will be there in the coming years. Similarly, younger generations of China are much more value-oriented in their purchase behavior, with the Chinese Gen Z generation were more concerned by eco-friendly products than any other Gen Z group in the world (25% versus 13%), according to a global strategy consulting firm OC&C (Achim 2021). With the two cohorts taking up 40% of the Chinese population in 2019 and projected to rise to about 65% by 2025, meeting the needs of the groups is essential in commercial success (Euromonitor 2019).

In order to truly understand the sustainable Chinese shoppers, there needs to be an important distinction to make between the Western and Chinese consumer mindset when it comes to sustainability. The former tend to be more altruistic in their intentions, in which sustainability is most associated with the greater good, such as saving the environment for future generations. However, for the Chinese consumer, buying green from fashion is much more out of self-interest, who are concerned about safety and health rather than about carbon emissions. Related to such self-interest, research shows that Chinese consumers are more attuned with social and ethical cues rather than environmental cues (Rahman 2020). In fact, new research found that one of the

motivations behind buying sustainably was stemming from saving face (Wei & Jung 2017). Because purchase intention for sustainable clothing is more stemmed from individual choice, sustainable fashion is not just a fashion statement, but an entire lifestyle. For instance, a Chinese mother will not only purchase organic food for her babies, but will also buy plant-eyed, organic cotton clothing for her entire family. Vincent Djen, director of Cheng Kung Garments and Chief Strategy Officer of the fashion circular solution company REMakeHub claims that over the years, from clothing to furniture, kitchenware, and skincare, sustainable shoppers shift their choices in many categories which include clothing. It's even viewed as a sought-out experience and a sign of luxury. The popularity of domestic brands such as The Green Party and OCE attest to such craze, with consistent storytelling stressing the importance of a healthy lifestyle (Zheng 2019). This is supplemented by the fact that China's younger demographics "have been raised in a culture of developing the self through education, cultural learning, travel and physical well-being" (Smith 2019). Chinese culture, for thousands of years, have embraced knowledge and education above material wealth, and sustainable fashion is fitting with the ideologies ingrained (Smith 2019). More broadly, Confucian culture that values social expectations and group mentality again deems sustainable fashion much more favorable for consumers (Wei & Jung 2017). This difference in the fundamental reasons behind why Chinese audiences are consciously buying is crucial in developing effective communication and marketing strategies if companies are to seize an opportunity.

What can be learned from this examination is that multiple parties in China are currently working towards a more sustainable future in fashion, which is progressively becoming the norm. The Chinese government has been working diligently to set policies and practices that

foster sustainable fashion companies, and an increasing number of non-governmental organizations (NGO) facilitating such an environment. Companies, incentivized to be more green, both from the government and customers, are making advancements to be sustainable in many different approaches. Finally, an accumulating number of individuals are calling for sustainable clothing brands not just as individual fashion choices, but as a substantial part of their life.

CONCLUDING REMARKS

Conclusion

To conclude, there is no doubt that COVID-19 has been an astronomical influence on the global fashion industry since the start of 2020. The virus catapulted many of the trends in the fashion industry including 1) digitization and the rise of E-Commerce, AR, and VR and 2) increased appetite for sustainable fashion shown by the changing consumer mindset, second-hand shopping, and hyperlocality. From the case study of China's market as a possible crystal ball into the post-pandemic future of fashion, one saw that its rapid move towards sustainable fashion is a transition that other countries will also go through after the global pandemic ends. The collaboration between the government, non-governmental organizations, companies, and shoppers demonstrates the impactfulness of concerted efforts on sustainable fashion.

Areas of Further Research

There are several limitations to this research that can be further discussed in future research. First, because the COVID-19 is enduring as of May 2021, the effects of the pandemic on the fashion industry are ongoing, which means that there will be more factors to discuss as time progresses, including possible new trends. Also, when the pandemic comes to an end, a more longitudinal approach to assessing the impact may be a promising area for further exploration. Second, a quantitative evaluation of the pandemic may be complementary to the qualitative analysis of COVID-19 that the paper found, perhaps surrounding the financial implications of sustainable companies. Third, this paper did not delve into the limitations that China currently faces in regards to sustainable fashion, which warrants further. Finally, considering other regions

that have been at the forefront of economic recovery from COVID-19, such as South Korea, Taiwan, Nigeria as case studies may be useful for a more accurate, detailed prediction of the fashion industry post-pandemic.

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